

July 30, 2018

CERTIFIED MAIL: 7014 2870 0001 8821 9369 RETURN RECEIPT REQUESTED

Chief, Air and TRI Section
Enforcement Division
U.S. Environmental Protection Agency Region 9
75 Hawthorne Street
San Francisco, California 94105

CERTIFIED MAIL: 7014 2870 0001 8821 9352

RETURN RECEIPT REQUESTED

Director, Air Enforcement Division Office of Civil Enforcement U.S. EPA Headquarters, MC 2242A 1200 Pennsylvania Avenue, NW Washington, D.C. 20460

CERTIFIED MAIL: 7014 2870 0001 8821 9345

RETURN RECEIPT REQUESTED

Chief, Environmental Enforcement Section Environment and Natural Resources Division U.S. Department of Justice Box 7611 Ben Franklin Station Washington, D.C. 20044-7611

Re: DOJ No. 90-5-2-1-10459

Re: United States v. Asarco

Consent Decree No. CV-15-02206-PHX-DLR Quarterly Report for the Second Quarter of 2018

Presented below is Asarco's quarterly report for the second quarter of 2018, as required by paragraphs 55 and B.36 of the above-referenced consent decree. Consent Decree reporting requirements are in bold italics followed by the required report information.

Paragraph 55.a.i: Emissions and monitoring data and corrective action records, including the following:

(1) The results of any performance tests that were required by the Consent Decree;

Smelter Method 5 Performance Tests:

No Method 5 performance testing was conducted during the second quarter of 2018.

Smelter Method 5B Performance Tests:

No Method 5B performance testing was conducted during the second quarter of 2018.

Concentrator Method 5 Performance Tests:

No Method 5 performance testing was conducted during the second quarter of 2018.

Flash Furnace, Converter, and Anode Buildings Opacity Performance Tests:

N/A. The due date for the submittal of a performance test plan per 40 C.F.R. § 63.1450(c) is 60 days after the completion of the converter retrofit project (CRP).

- (2) Copies of any Visible Emissions evaluations or records for which opacity was 4 percent or greater for the building housing the flash furnace, converters, and anode furnaces (to include date, time, and duration of the opacity);
- (3) A description of any corrective actions taken to address the opacity from the building housing the flash furnace, converters, and anode furnaces (to include the date and time such actions were commenced and completed), along with a description of the cause of the opacity;

Exceedance(s) of 4% opacity limit applicable to visible emissions from the flash furnace, anode furnaces, and converter and not yet superseded by requirements related to the installation of the long-path optical density monitors:

N/A. Dependent upon CRP completion.

<u>Investigation(s)</u>, <u>cause(s)</u> and <u>corrective action(s)</u> taken:

N/A. Dependent upon CRP completion.

- (4) Dates, times, and duration of each bag leak detection system alarm sounding, the cause of the alarm and the date and time that ASARCO commenced investigation of the baghouse, and a description of the corrective actions taken, if any, along with the date and time such corrective actions were completed;
- (5) The total alarm time for each bag leak detection system, as determined in accordance with subparagraph 26.a.v;

Total alarm time for each bag leak detection system:

The secondary hood baghouse had no alarms during the second quarter of 2018.

The anode baghouse had the following alarms during the second quarter of 2018.

Date	Time of Alarm	Total Duration of	Module Number
		Alarm (hours)	
4/23/2018	8:13 - 8:14	0.02	2
4/23/2018	8:19 - 8:20	0.02	4

The furnace vent baghouse had the following alarms during the second quarter of 2018.

Date	Time of Alarm	Total Duration of Alarm (hours)	Module Number	
4/25/2018	14:30 - 15:46	1.27	C, F, G, H, J	

Exceedance(s) of alarm limit of no more than 5% of total operating time in any 6-month period:

Secondary Hood Baghouse: January 1, 2018 – June 30, 2018		
Total duration of bag leak detection system alarm hours 0		
Total hours of source operation		
Percent of time in alarm (operating hours)		

Anode Baghouse: January 1, 2018 – June 30, 2018	
Total duration of bag leak detection system alarm hours 0.04	
Total hours of source operation	3384
Percent of time in alarm (operating hours)	0.001%

Furnace Vent Baghouse: April 1, 2018 – June 30, 2018		
Total duration of bag leak detection system alarm hours		
Total hours of source operation		
Percent of time in alarm (operating hours)		

Note: The furnace vent baghouse does not yet have six months of operating time so the 5% alarm time was not calculated for the second quarter of 2018. The Hayden Smelter was down from March 10, 2018 through April 19, 2018 to tie in equipment relating to the CRP and annual maintenance activities. No processing equipment was operating during any of this time period.

Investigation(s), cause(s) and corrective action(s) taken:

The two alarms that occurred on April 23, 2018 at the anode baghouse were caused by the start-up of the anode furnaces from the smelter maintenance outage. No corrective actions were necessary.

The alarms recorded on the furnace ventilation baghouse on April 25, 2018 were not true alarms. These alarm readings were the result of system functionality testing of the new bag leak detection instrumentation on the new baghouse. No corrective actions were necessary.

(6) Dates, times, and duration of any instances where pressure drop or scrubber liquid flow rates were outside the established ranges for those parameters, the date and time that ASARCO initiated investigation, the readings at the time of the issue, a description of the underlying cause for those readings, and a description and explanation of any corrective actions, including the date and time that such actions were commenced and completed;

Hourly (block) average pressure drop(s) and liquid flow rate(s) outside range established in most recent Method 5 test:

The hourly block averages outside the established range(s) are detailed in the enclosed compact disk.

Investigation(s), cause(s) and corrective action(s) taken:

The investigation(s), cause(s) and corrective action(s) taken for each event are detailed in the enclosed compact disk.

Times scrubber(s) not in service or believed to be malfunctioning:

The times that the scrubber(s) were not in service or believed to be malfunctioning are detailed in the enclosed compact disk.

(7) Dates, times, and descriptions of deviations from the gas capture parametric monitoring requirements and/or limits of Paragraph 9;

PRIMARY HOODING PARAMETER:

<u>Failure(s)</u> to achieve minimum air infiltration ratio of 1:1 during blowing when improved hood is operational averaged over 24 blowing hours rolled hourly:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

SECONDARY HOODING PARAMETER DURING BLOWING:

Failure(s) to achieve minimum exhaust rate of 35,000 SCFM at a converter averaged over 24 blowing hours rolled hourly, unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

SECONDARY HOODING PARAMETER DURING NON-BLOWING:

<u>Failure(s)</u> to achieve minimum exhaust rate of 133,000 SCFM at a converter averaged over 24 non-blowing hours rolled hourly, unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

SECONDARY HOODING PARAMETER WHEN HOOD DOORS ARE CLOSED:

<u>Failure(s)</u> to achieve minimum negative pressure drop across a hood of 0.03 mm of Hg (0.007 inches of water), unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion.

<u>Investigation(s)</u>, cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

TERTIARY HOODING PARAMETER AT ALL TIMES MATERIAL IS PROCESSED IN COPPER CONVERTER DEPARTMENT:

<u>Failure(s)</u> to achieve minimum exhaust rate of 400,000 ACFM averaged over 24 hours of copper converter department material processing rolled hourly, unless an alternative parameter has been approved:

N/A. Dependent upon CRP completion.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

(8) Dates, times, and descriptions of deviations when ASARCO operated the furnaces, capture systems, baghouses, R&R Cottrell, or any other equipment in a manner inconsistent with the approved Operations and Maintenance Plan;

N/A. On March 20, 2018 Asarco received comments from EPA regarding the April 10, 2017 submitted Operation and Maintenance Plans. Asarco submitted the revised Operation and Maintenance Plans according the submittal schedule that Asarco and EPA agreed upon on May 3, 2018. The first submittal package was sent to EPA on May 4, 2018, the second submittal package was sent to EPA on June 1, 2018, and the last submittal package was sent to EPA on June 29, 2018.

(9) Dates, times, and descriptions of deviations when ASARCO's material handling was carried out in a manner inconsistent with the approved Operations and Maintenance Plan and/or Fugitive Dust Plan;

OPERATION AND MAINTENANCE PLAN

On March 20, 2018 Asarco received comments from EPA regarding the April 10, 2017 submitted Operation and Maintenance Plans. Asarco submitted the revised Operation and Maintenance Plans according the submittal schedule that Asarco and EPA agreed upon on May 3, 2018. The first submittal package was sent to EPA on May 4, 2018, the second submittal package was sent to EPA on June 1, 2018, and the last submittal package was sent to EPA on June 29, 2018.

FUGITIVE DUST CONTROL PLAN

On March 15, 2018 EPA approved of the submitted February 2, 2018 version of the Fugitive Dust Plan. Asarco began implementing the inspection forms as specified in the approved Fugitive Dust Plan and implementing the work practices as specified. The anemometer's data logger was connected to Asarco's DCS during the month of June 2018 and soon after the high wind event email notification system was implemented by the end of June 2018. Asarco's contractor installed the new water spray systems throughout the second quarter and is schedule to complete all new water spray systems in July 2018. All wind fence installations were completed in May 2018.

AJAX, Ltd. was selected to carry out the inactive facilities site and borrow material characterization and final site engineering for the Soil Cover Plans and Vegetative Cover Plans as specified in the approved Inactive Facilities Closure and Vegetation Plan. During the month of May 2018 samples were taken in each inactive facility and potential borrow material areas to better characterize the material present and inform the engineering designs. Once the lab results were received preliminary engineering began. In June initial plans to close the 82 Dam on the smelter lined impoundment were discussed with Arizona Department of Water Resources (ADWR) to incorporate their requirements for this facility in the final closure design plans.

<u>Deviation(s)</u> from material handling requirements of approved fugitive dust control plan and corrective action(s) taken:

None during the second guarter of 2018.

Exceedance(s) of 15% Method 9 opacity limit on visible emissions from any source listed in the approved fugitive dust control plan (i.e., sources other than the furnaces and converter building) and corrective action(s) taken:

None during the second quarter of 2018.

Opacity readings outside major openings of secondary and tertiary crushers Total Enclosure or fine ore storage building in excess of minimum measurable opacity level over 6-minute period using long-path optical density monitors and corrective action(s) taken:

The fugitive dust plan was approved by EPA on March 15, 2018 and Asarco has 120 days after approval of the fugitive dust plan to install the open path opacity monitors outside of the secondary crusher and fine ore storage buildings. The new opacity monitors had been ordered in March 2018, however shipment was delayed by the manufacturer. As of June 30, 2018, the monitors had not been shipped to Asarco and the manufacturer stated that they would be shipped in early July 2018.

Event(s) when DCS system recorded data outside of established operational parameters, investigation(s), cause(s), corrective action(s), and degree of success:

<u>Water Spray Systems Operational Parameters</u>: The fugitive dust plan was approved by EPA on March 15, 2018 and Asarco has 120 days to install the new water spray systems including the DCS communication capabilities. The DCS communication connections for the water spray systems are in the process of being installed.

<u>Camera Hill Meteorological Station Data:</u> The wind data is being continuously recorded on our contractor's database, but was not incorporated in Asarco's DCS system until June 2018. Soon after incorporating the Camera Hill wind data into Asarco's DCS the high wind event email notification system was implemented.

<u>Acid Plant Scrubber Blowdown Solids Electric Dryer start/stop times</u>: Currently being recorded in the DCS per fugitive dust plan requirements.

<u>Concentrator Scrubber Parameters & Operational Run Times</u>: See enclosed scrubber alarm report for the second quarter of 2018.

<u>Refractory Brick Crusher Operational Parameters</u>: The refractory brick crusher did not operate during the second quarter of 2018. Water spray system DCS communication is currently in the process of being installed.

Dates and times when DCS system was not recording data:

The fugitive dust plan was approved by EPA on March 15, 2018 and Asarco has 120 days to install the new water spray system including the DCS communication capabilities. The Camera Hill anemometer's data logger was connected to Asarco's DCS during the month of June 2018 and soon after the high wind event email notification system was implemented by the end of June 2018.

AMBIENT MONITORING NETWORK

Ambient monitoring network raw data and calculated ambient levels for the second quarter of 2018 are enclosed with this report on a compact disc.

HIGH WIND EVENTS

High Wind Event data for the second quarter of 2018 is enclosed with this report on a compact disc.

(10) Dates, times, and descriptions (including emissions data) of any periods where ASARCO failed to meet an emission limit or an emissions control efficiency established under this Consent Decree;

ACID PLANT PM EMISSION LIMIT

Exceedance(s) of 6.2 mg/dscm limit as demonstrated through performance testing: None

SECONDARY HOOD BAGHOUSE EMISSION LIMIT

Exceedance(s) of 23 mg/dscm limit as demonstrated through performance testing: None

ANODE FURNACE BAGHOUSE PM EMISSIONS LIMIT

Exceedance(s) of 23 mg/dscm limit as demonstrated through performance testing: None

FURNACE VENT BAGHOUSE PM EMISSIONS LIMIT

Exceedance(s) of 23 mg/dscm limit as demonstrated through performance testing: None

COPPER CONCENTRATE DRYER PM EMISSIONS LIMIT

The copper concentrate dryer emissions are routed to the new furnace vent baghouse. See above section regarding the furnace vent baghouse PM Limit compliance.

FLASH FURNACE TAPPING/SKIMMING EMISSIONS CAPTURE SYSTEM PM EMISSIONS LIMIT

The flash furnace tapping/skimming emissions capture system is routed to the new furnace vent baghouse. See above section regarding the furnace vent baghouse PM Limit compliance.

PROCESS-WIDE TOTAL PM EMISSIONS LIMIT

The due date for beginning the use of a measuring system described in paragraph 24.a of the decree is June 1, 2019.

Exceedances of 0.6 lb PM per ton of concentrate smelted total PM limit(s):

N/A. Dependent upon CRP completion.

Investigation(s), causes(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

DUCON-TYPE WET SCRUBBER OPERATIONAL REQUIREMENTS

Exceedance(s) of 0.05 g/dscm limit: None

DRY LIME SCRUBBING OF SO₂ ROUTED TO SECONDARY HOOD AND FURNACE VENT BAGHOUSES

Failure(s) to meet applicable control efficiency:

N/A. Dependent upon CRP completion.

<u>Investigation(s)</u>, cause(s) and corrective action(s) taken or status of demonstration of technical infeasibility of control efficiency:

N/A. Dependent upon CRP completion.

CORRECTIVE ACTION TRIGGERS FOR ACID PLANT

Date	Time of Trigger Level Alarm	Cause and Corrective Actions Taken if Necessary
		No trigger levels were reached during the second quarter of 2018.

SO₂ Emissions Limit for Gases Collected From the Converters

Exceedance(s) of applicable 650 ppmv limit for gases routed to acid plant or secondary hood baghouse or gases in the tertiary hood exhaust:

No exceedances of the 650 ppmv limit on the acid plant tail gas, secondary hood baghouse or the tertiary ventilation system occurred during the second quarter of 2018.

Note: The initial RATA for the new SO_2 CEM for the tertiary ventilation system occurred on May 15, 2018 and the initial RATA for the new SO_2 CEM on the outlet of the secondary hood baghouse occurred on May 14, 2018. Both monitors passed the initial RATA and compliance with the 650 ppmv limit for those two sources commenced the following day.

<u>Investigation(s)</u>, cause(s) and corrective action(s) taken:

N/A.

(11) Dates, times and descriptions where ASARCO exceeded the Blowing rate limit set forth in Paragraph 8 and/or, for such time as the Blowing hour limit in Paragraph 8.b remains applicable, the Blowing hour limit;

Exceedance(s) of converter blowing limit of 32,000 SCFM averaged over 5 minutes of blowing and rolled each minute:

Date	Time	Converter Number	Cause
4/19/2018	19:44	5	Test roll in of converter not processing copper. Not considered blowing activities per Consent Decree definition of "blowing."
4/20/2018	9:31	5	Test roll in of converter – not processing copper. Not considered blowing activities per Consent Decree definition of "blowing."
5/16/2018	15:20 – 15:28	5	System Malfunction - Converter rolled in to blowing position with no blast air so the tuyeres got plugged. Then the converter began rolling out and stalled as the converter was partially rolled out. Not considered blowing activities per Consent Decree definition of "blowing."

TOTAL COMBINED BLOWING TIME OR SO₂ LIMIT ON ACID PLANT TAIL GAS

Exceedance(s) of total combined blowing time limit at all converters of 21 hours per 24-hour period rolled hourly, unless Asarco accepts 100 ppmv SO₂ limit on acid plant tail gas:

None in the second quarter of 2018.

Investigation(s), cause(s) and corrective action(s) taken:

N/A. Dependent upon CRP completion.

ii. Status and/or completion of construction or compliance milestones;

CONVERTER RETROFIT PROJECT

Existing converter #3's demolition began in January 2018 and the new converter #3 was set in place on February 26, 2018. Converter #3's hooding, mouth burner, flux feed system and other ancillary equipment tie-ins was on-going during the second quarter. Converter #3 installation and connection to ventilation systems etc. is scheduled to be completed in September 2018. The pre-commissioning for the new converters Nos. 4 and 5 was completed and the hot commissioning began in April 2018 following the smelter outage start up on April 19, 2018. Equipment installation and operation was within the May 1, 2018 deadline for 2 out of the 3 new converters. See also the PowerPoint presentation titled "Hayden CRP 2Q2018 Status" for additional information.

R&R COTTRELL ESP REPLACEMENT BAGHOUSE

New furnace ventilation baghouse was operational upon the start-up from the smelter outage on April 19, 2018. Hot commissioning of the new baghouse began in April 2018. Equipment installation and operation was within the May 1, 2018 deadline.

DRY LIME SCRUBBING OF SO₂ ROUTED TO BAGHOUSES

The dry lime scrubbing system for the new furnace ventilation baghouse and secondary hood baghouse was operational upon the start-up from the smelter outage on April 19, 2018. Hot commissioning of the new lime injection system began in April 2018. Equipment installation and operation was within the May 1, 2018 deadline.

PREPARATION OF FUGITIVE EMISSIONS STUDY PROTOCOL

Asarco selected SLR International Corp. to assist in preparing the fugitive emission study protocol. The protocol for the fugitive emission study was submitted to EPA for approval on June 15, 2016. Asarco received comments on the submitted protocol on December 5, 2016 and on January 20, 2017 Asarco submitted a revised fugitive emission study protocol addressing those comments. On May 31, 2017 Asarco received EPA's approval of the revised fugitive emissions study protocol.

IMPLEMENTATION OF APPROVED FUGITIVE EMISSIONS STUDY PROTOCOL

The due date for the commencement of the fugitive emissions study protocol for the initial study is 6 months after the completion of the converter retrofit project.

LONG-PATH OPTICAL DENSITY MONITORS SPECIFIED IN PROTOCOL

The due date for the installation of the three long-path optical density monitors at the building emission points specified in the fugitive emissions study protocol is 6 months after the completion of the initial fugitive emissions study.

iii. Status of PM CEMS installation and PS-11 testing pursuant to Paragraph 14;

On March 8, 2017 EPA approved of the March 3, 2017 revised Installation, Certification and QA/QC Protocol for the PM CEMS. From May 8-12, 2017, the initial PS11 correlation testing was performed on the anode baghouse PM CEMS and the testing report was submitted on July 18, 2017. The SICK light scatter PM CEM was successfully certified and the Altech beta attenuation PM CEM was not successfully certified. On September 6, 2017, a revised PS11 Certification testing protocol for the Altech beta attenuation PM CEM located at the anode baghouse was submitted to EPA for review and approval. A conference call was held on October 3, 2017 between Asarco, EPA, and Asarco's PM CEMS vendors to answer EPA's questions on the September 6, 2017 revised PS11 Certification Protocol. Additionally, the PS11 certification re-test for the Altech beta-attenuation monitor occurred during the week of October 30, 2017. The results of the Altech beta-attenuation monitor showed that it passed the second round of PS11 correlation testing and the report was submitted to EPA on January 22, 2018. Additionally, Asarco notified EPA in the report cover letter dated January 22, 2018, that the Altech beta-attenuation monitor would be relocated to the new furnace vent baghouse during the March 2018 plant wide outage. The Altech beta-attenuation monitor was successfully relocated to the outlet of the furnace ventilation baghouse.

The PM CEMS located at the secondary hood baghouse and the acid plant tail gas stream were installed during the month of August 2017. The initial PS11 correlation testing for these two PM CEMS occurred during the weeks of October 2 – 13, 2017. The SICK light scatter monitor located on the secondary hood baghouse passed the initial PS11 correlation testing and the acid plant Altech beta-attenuation monitor did not pass the initial PS11 correlation testing. The reports for these tests were submitted to EPA on January 22, 2018. On March 2, 2018 Asarco submitted a protocol for the re-test of the acid plant Altech beta-attenuation monitor to EPA to review and approve. On March 14, 2018 EPA sent comments on the protocol and Asarco incorporated those changes in a revised testing protocol that was submitted to EPA on March 22, 2018. On March 29, 2018 EPA approved of the March 22, 2018 revised Acid Plant re-test protocol. The PS11 certification re-test occurred from June 4-8, 2018.

On March 16, 2018 Asarco submitted the new furnace vent baghouse and tertiary ventilation system's PM CEMS Installation, Certification, and QA/QC Protocol to EPA for review and approval. On March 22, 2018 EPA submitted its comments on the March 16, 2018 protocol and Asarco revised the protocol accordingly and submitted to EPA for approval on April 3, 2018. On April 6, 2018 EPA approved of the revised protocol. The initial PS11 correlation testing for the PM CEMS located on the tertiary ventilation system and furnace vent baghouse is scheduled for July 9 – 20, 2018.

iv. Problems encountered or anticipated with Consent Decree compliance, together with implemented or proposed solutions;

None

v. Status of any permit applications pertaining to any of the requirements of this Consent Decree;

On May 5, 2017 Asarco submitted its replacement Title V Air Quality Control Permit Renewal application incorporating all of Paragraph 101 permitting requirements from the Consent Decree, and on May 12, 2017 Asarco submitted a copy of that permit application to the Paragraph 117 list of addressees as required. On June 23, 2017 Asarco submitted a revision to the May 5, 2017 Title V Air Quality Permit Renewal Application to ADEQ, and on June 26, 2017

Asarco submitted a copy of those revisions to the Paragraph 117 list of addressees as required. Asarco and ADEQ have regularly scheduled conference calls to facilitate the permitting process. On September 26, 2017, Asarco submitted a letter to EPA requesting clarification on the inclusion of the Fugitive Dust Plan into the Renewal Title V Air Permit. On December 19, 2017 Asarco received a clarification letter from EPA on how best to incorporate the Fugitive Dust Plan provisions in the Title V Renewal Air Permit. On December 27, 2017 Asarco submitted a revision to the May 5, 2017 Title V Air Quality Permit Renewal Application to ADEQ, and Asarco submitted a copy of those revisions to the Paragraph 117 list of addressees as required on that same day. ADEQ held a 30-day public comment for the Hayden Operation's Renewal Title V Air Quality Permit No. 39948 which began on January 10, 2018 and ended February 8, 2018. A public hearing was also held on February 8, 2018.

ADEQ addressed all public comments received and revised the draft renewal permit accordingly and submitted to EPA for review. ADEQ received some comments from the EPA on February 23, 2018 and addressed those comments accordingly. On March 14, 2018 ADEQ submitted the final draft permit to EPA for approval. On March 23, 2018 ADEQ issued a letter granting the Hayden Operation's Title V Renewal Air Quality Permit No. 39948 which will be issued upon Asarco submitting payment of final permitting fees to ADEQ. The Hayden Operation's Title V Renewal Air Quality Permit No. 39948 was issued by ADEQ on April 20, 2018.

vi. The status of the SEP under Section VIII and Appendix C including, at a minimum, a narrative description of activities undertaken; and

On March 13, 2018 an order was placed for the new diesel-electric switch locomotive. On May 31, 2018 the new diesel electric switch locomotive was delivered on-site. The due date for purchasing and operating the new diesel-electric switch locomotive is December 30, 2018.

vii. The status of the Environmental Mitigation Projects under Section VII and Appendix A including, at a minimum, a narrative description of activities undertaken; status of Environmental Mitigation Project milestones set forth in Appendix A; and a summary of costs incurred since the previous report.

PINAL COUNTY ROAD PAVING ENVIRONMENTAL MITIGATION PROJECT

To date Asarco has submitted a total of \$6,000,000 to Pinal County for this project. As of June 30, 2018, the County has spent \$5,892,746.85 on the project.

The project was deemed complete by EPA on March 1, 2018 when EPA advised that the \$107,253.15 left over project money would be used for future maintenance of the newly paved Camino Rio Road. Asarco submitted the final project report to EPA on April 12, 2018 and EPA submitted comments on this report to Asarco on May 16, 2018. Asarco incorporated EPA's comments and submitted the revised project report to EPA on May 17, 2018. On June 7, 2018 EPA approved of the revised final project report.

LEAD-BASED PAINT ABATEMENT ENVIRONMENTAL MITIGATION PROJECT

On January 10, 2018 EPA approved of the December 14, 2017 version of the Lead Based Paint Abatement Project Plan. Asarco and CAG established a special escrow account with a bank for this project on April 19, 2018. The \$2 million project funds were transferred into the escrow account on April 20, 2018. CAG has withdrawn \$30,220.00 for the project as of June 30, 2018.

During the second quarter CAG has submitted request for proposals to several consulting firms for the Environmental Assessment portion of this project. Ultimately, CAG chose Adam and Wendt for this work and currently CAG is negotiating a contract with Adam and Wendt. CAG has also conducted an initial public outreach meeting in the Town of Hayden, created a dedicated email for inquiries about the project, is generating a client list, and mailed information regarding this project to all the residents of both Hayden and Winkelman, not just the properties that qualify as pre-1978, for maximum community awareness. Additionally, CAG's GIS department has created an interactive map of the two towns that provides lead abatement project progress for each property. CAG is also working with the Hayden-Winkelman Unified School district to disseminate information to the students' families as the school year starts.

55.b Description of any non-compliance with the requirements of this Consent Decree, including those identified in Paragraph 55.a.i and an explanation of the violation's likely cause and the remedial steps taken, to be taken, to prevent or minimize such violation.

There were no issues of non-compliance during the second quarter of 2018.

PARAGRAPH 58. REPORT CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Joseph A. Wilhelm General Manager Hayden Operations

JAW/rcg

Enclosure